Assessment and College and Career Ready Resources (3-5) Math

Assessment Resources

ISTEP+ Grades 3-8 web link includes grades 3-5 resources:
-Blueprints
-Item Samplers
-Instructional and Assessment Guidance
-Released Part 1 Applied Skills Items and Scoring Notes
-Calculator Policy
-Math Graph Paper Guidance
-Math Rubric for ISTEP+ Part 1
-Use of Highlighters

2016-17 Indiana Assessment Windows
Assessment Vocabulary
ISTEP+ Performance Level Descriptors
ISTEP+ Experience Online

Assessment Analysis of ISTEP+ 2014-2016

Evidence strongly demonstrates that Indiana students in grades 3-8 are struggling with the following components:

Number Sense
Geometry and Measurement
Algebraic Thinking and Data Analysis
Computation

College and Career Ready Standards Resources Aligned to Assessment Analysis

It is important in the mathematics classroom that teachers "**establish mathematical goals to focus learning**" and begin working with students on developing a Growth Mindset, especially regarding the areas above, *Number Sense, Geometry & Measurement, Algebraic Thinking and Functions and Computation*. Developing opportunities for teachers to "**support productive struggle in learning mathematics**" allows for delving more deeply into understanding the mathematical structure of problems and relationships among mathematical ideas. A great resource for this is Mistakes Grow Your Brain. Providing students with instruction which "**implements tasks that promote reasoning and problem solving**" will move the lesson to higher-level demand tasks. Possible tasks are Tasks (youcubed), Dan Meyer's Three-Act Math Tasks, and Graham Fletcher's 3-Acts Lessons. As we move students through the math curriculum, it is important that that we "**build procedural fluency from conceptual understanding**" in the areas above because an established foundation based on conceptual understanding allows for procedural skill/fluency to be developed. There should be special consideration in mathematics for Depth Not Speed.

Explore Math (Games, Lessons, and Resources):

- Front Row
- Desmos
- Balanced Assessment in Mathematics
- Mathematics Assessment Project (Process Standards)
- Visual Mathematics (YouCubed)
- Visual Math Improves Math Performance
- National Library of Virtual Manipulatives
- Place Value/Arithmetic Models/Arithmetic Algorithms
- Word Problems/Model Drawing
- Mathalicious Real-World Lessons
- Number Sense (youcubed)

Vocabulary Development and Instruction:
Ensure that students are being provided high-quality vocabulary instruction.

- What's the Big Deal about Vocabulary?
- Building a Bridge to Academic Vocabulary in Mathematics
- Planning for Content-Area Vocabulary Instruction
- 5 Ideas for Instructing Vocabulary
- IDOE Math Glossary & Vocabulary Words

General Resources:

- Elementary Math Resources
- Engaging in the Mathematical Processes (Look-fors)
- Mathematical Processes Posters